

## PRESCRIBED GRAZING

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# **Conservation Practice Fact Sheet**



Prescribed grazing offers various levels of grazing management dependent upon the land owner/manger's objectives. Good grazing management will increase forage production and plant vigor, and maintain quality. Soil, water, animal, plant and air resources are improved. The practice can increase economic returns by increasing harvest efficiency and decreasing inputs.

# Pasture numbers and grazing efficiency.

The intensity of management is dependent upon the type of operation. For cow-calf producers, twice a week rotation works well. For stocker operators, every other day is better while grass-based dairies should move animals to fresh pasture every time they are milked. Farms wanting a high degree of harvest efficiency should move daily. Paddock number is determined by the equation: number of paddocks = (number of days rest + number of days a paddock is grazed) / frequency of rotation. For example, 21 days of rest + 3 days grazing a paddock/3 day rotation = 8 paddocks.

| Number of | Days in each | Harvest    |
|-----------|--------------|------------|
| paddocks  | paddock      | efficiency |
| 1         | continuous   | 30-35%     |
| 4-6       | 6-12         | 40-45%     |
| 8-12      | 3-5          | 50-60%     |
| 12-24     | 1-2          | 60-70%     |

#### Managing the rotation — when to rotate.

A daily rotation is easier to manage as that takes the decision out of when to rotate. A rotation of multiple days is harder to manage as it is sometimes difficult to decide to move or not move; however, when in doubt, move. It is better to leave too much material than graze too short. It should be noted that the rest period is more important than the minimum grazing height.

If using grazing heights as a guide, consider the following: Cool season grasses should have livestock removed when grazed down to 2-4 inches. Warm season grasses such as bermuda can be grazed to two inches. The suggested grazing height for taller grasses such as millet or native warm season grasses is 4-6 inches. Grasses grazed too short will not grow back as



fast. Pastures should be grazed after they reach the "3-leaf" stage of growth as after that the plants slow down in growth and most of the growth is stem production and seed development. Normally rest periods should be 20-40 days depending on rainfall.

Some producers choose to not cut hay and carry more animals in the spring of the year. In this case, paddocks ahead need to be evaluated as to whether they need to be "topped" off to keep the forage under control. Those cutting hay can get pastures back under control by cutting hay. Some graziers prefer to not have hay fields but cut the paddocks for hay that get out of control, and they cut different paddocks each year. This helps with weed control and fertility.

Type of operation should also be considered as to when to rotate. When pasture is grazed by cattle below 4-6 inches, intake goes down as the animal is not able to get a "mouthful" with each bite. High demand animals should be moved more often and with more material left in the pasture. This is where "clean up" animals can be brought in to graze the pastures shorter (first and second grazers). This means that having some animals with a lower nutrition requirement than others and limiting intake is not a problem. They can be used to graze pastures shorter.

## Strip grazing.

Many producers use temporary fencing to subdivide pastures and create paddocks for more intensive grazing. This concept is particularly useful for stockpiled forages such as fescue for winter grazing or stockpiled bermudagrass for late fall grazing. The University of Arkansas Cooperative Extension Service has been conducting demonstrations of grazing stockpiled forages. These trials show the strip grazing increases the number of grazing days per acre and increases economic return. The concept of strip grazing means that a back fence is not used as the forage is not actively growing. This simplifies access to water.

A modification of strip grazing can be used to subdivide pastures during the growing season. Livestock will not graze areas (when a good supply of fresh forage is available) until regrowth has gotten tall enough to graze. This is usually 3-4 days after an area is grazed. A pasture can be stripped every day and a back fence not used for 3-4 days after grazing. This alone could increase the grazing efficiency of many operations without a large investment in fencing, especially if a farm has 4-6 permanent pastures. This approach can also be used effectively in times of dry weather to stretch forage supplies.

## Sacrifice pastures.

There are times of the year that pastures are abused because of feeding hay or when pastures are too wet for good grazing management. This necessitates the use of "sacrifice" pastures. Under wet conditions, putting cattle on pastures with a good sod base (e.g., tall fescue pastures) will help. Feeding hay during periods of drought allows other pastures to rest. Feeding hay on pastures that need to have higher levels of fertility or increased organic matter is a good practice. Sacrifice areas should not be adjacent to bodies of water and should have a filter or buffer area between them and the streams. Properly managed pastures can serve as a filter or buffer area.

### Fencing for prescribed grazing.

Electric fencing is recommended for managing multiple pastures. Great advances have been made in electric fencing technology. Producers need to select a high quality low impedence fence charger and establish with a good grounding system. Also, 12.5 guage high tensile wire should be used for permanent fencing. A high quality polywire can be used for temporary fencing subdivisions. For cattle one wire gives adequate control. Small ruminants require three or more wires.